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Greg Opheim

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EXAMINER

ZHEN, LI B

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/670,642	<b>Applicant(s)</b> OPHEIM, GREG	
	<b>Examiner</b> Li B. Zhen	<b>Art Unit</b> 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claims 1 – 20 are pending in the application.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Specification***

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: specification does not provide antecedent basis for “storage module”.

### ***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 19 – 20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 19 recites a computer system comprising: a communication module, storage module, search module, downloading module and an updating module, which are interpreted as software. Currently presented claim 19 does not include any computer hardware; therefore, the system as recited in claim 19 is considered to include

software only. Computer software is functional descriptive material; however, function descriptive material is nonstatutory when claimed as descriptive material per se. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Since claim 19 does not recite the software as being recorded on a computer-readable medium, the system is interpreted as comprising functional descriptive material per se and non statutory. See MPEP § 2106.01.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,449,715 to Krivoshein in view of U.S. Patent No. 7,266,812 to Pagnano.**

8. As to claim 1, Krivoshein teaches a method of updating a host application running on a host system in a process plant [input routine 74 may create or update a device definition for each of the different devices within the remote I/O network wherein this device definition stores data needed to document and/or configure the device; col.

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13, lines 36 – 60], wherein the host system [host workstations 14; col. 7, lines 30 – 57] is connected to one of a plurality of process control devices used in the process plant [communicates with devices within the device networks 30, 32, 34 and 36 and with the host workstations 14 to control a process; col. 7, lines 30 – 57], the method comprising:

    sending a first command from the host system [Placing the configurator 76 in the host workstation 12; col. 34, lines 52 – 67] to a device to request a device description identification [user can provide a description of the device revision; col. 21, line 65 – col. 22, lines 9];

    receiving the device description identification at the host system [user input routine 74 accesses the GSD file to obtain the object type, the identification number, and the hardware and software release of the device revision; col. 21, line 65 – col. 22, lines 9]; and

    updating the host application to include the device description [input routine 74 may create or update a device definition for each of the different devices within the remote I/O network wherein this device definition stores data needed to document and/or configure the device; col. 13, line 36 – col. 14, line 49]. Krivoshein does not specifically disclose downloading a device description associated with the device description identification into the host system using the device description identification.

    However, Pagnano teaches transmitting the non-proprietary language Device Description file using a Web Service [col. 2, lines 45 – 52], downloading a device description associated with the device description identification into the host system using the device description identification [second processing system 140 can use the

Simple Object Access Protocol ("SOAP") to request the Web Service to be used for transmitting the non-proprietary language Device Description file; col. 5, lines 5 – 40], and updating the host application to include the device description [the user (e.g., an employee of the client) receives the particular information/data from the first processing system 120, the user is enabled to communicate with the various field devices that may be used to control and measure parameters within the process; col. 5, lines 5 – 40].

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Krivoshein to incorporate the features of Pagnano. One of ordinary skill in the art would have been motivated to make the combination because this allows device descriptions to be accessed via Web protocols and data formats, such as Hypertext Transfer Protocol ("HTTP") and Extensible Markup Language ("XML") by applications implemented in any language for any platform [col. 4, lines 45 – 60 of Pagnano].

9. As to claim 9, Krivoshein as modified teaches a method of providing a software update for a host application running on a host system [col. 13, lines 36 – 60 of Krivoshein], the method comprising:

    sending a first command [col. 34, lines 52 – 67 of Krivoshein] to a first device to request a first device description identifying a first device description [col. 21, line 65 – col. 22, lines 9 of Krivoshein], wherein the first device description is used to communicate with the first device [establish communication or enable communication

between a field device and a controller or other device during runtime of the process control system 10; col. 13, lines 37 – 60 of Krivoshein];

receiving the first device description identification at the host system [col. 21, line 65 – col. 22, lines 9 of Krivoshein];

determining if the host system includes the first device description using the first device description identification [col. 14, lines 23 – 50 of Krivoshein];

automatically downloading the first device description onto the host system if the host system does not have the first device description [col. 5, lines 5 – 40 of Pagnano];  
and

updating the host application with the first device description [col. 13, line 36 – col. 14, line 49 of Krivoshein].

10. As to claim 14, Krivoshein as modified teaches a computer system for updating a process control host application with a device description of a process control device [col. 13, lines 36 – 60 of Krivoshein], the computer system being connected to a device description database [col. 14, lines 23 – 50 of Krivoshein] via a communication network, the computer system comprising:

a processing unit [col. 35, lines 1 – 22 of Krivoshein];

a computer readable memory [col. 35, lines 1 – 22 of Krivoshein]; and

a software routine stored on the computer readable memory and executable on the processing unit [col. 34, lines 52 – 67 of Krivoshein] to:

receive a device description identification related to a process control device from a device [col. 21, line 65 – col. 22, lines 9 of Krivoshein];

download the device description of the process control device from the device description database using the device description identification [col. 5, lines 5 – 40 of Pagnano]; and

update the host application with the device description [col. 13, line 36 – col. 14, line 49 of Krivoshein].

11. As to claim 19, Krivoshein as modified teaches a computer system for use in process plant having a plurality of process control devices and one or more process applications requiring communication with the plurality of process control devices [col. 13, lines 36 – 60 of Krivoshein and col. 4, lines 18 – 45 of Pagnano], the computer system comprising:

a communication module operable to request a device description identification from one of the plurality of devices [col. 21, line 65 – col. 22, lines 9 of Krivoshein];

a storage module operable to store the device description identification [user input routine 74 accesses the GSD file to obtain the object type, the identification number, and the hardware and software release of the device revision; col. 21, line 65 – col. 22, lines 9 of Krivoshein];

a search module operable to search for a device description database storing the device description identified by the device description identification [col. 4, lines 45 – 60 of Pagnano];



a downloading module operable to download a device description from the device description database [col. 5, lines 5 – 40 of Pagnano]; and

an updating module operable to update one of the one or more process applications with the device description [col. 13, line 36 – col. 14, line 49 of Krivoshein].

12. As to claim 2, Krivoshein as modified teaches downloading the device description includes downloading the device description from one of a CD-ROM, a diskette, and an online database [col. 14, lines 23 – 50 of Krivoshein and col. 4, lines 17 – 45 of Pagnano].

13. As to claim 3, Krivoshein teaches updating the host application includes copying the device description into the host application [col. 13, line 36 – col. 14, line 49].

14. As to claim 4, Krivoshein teaches the host system is a system in a process plant and the device is one of a plurality of process control devices used in the process plant [col. 4, lines 17 – 45].

15. As to claim 5, Krivoshein teaches searching for the device description on the host system based on the device description identification [col. 4, lines 45 – 60 of Pagnano].

16. As to claim 6, Krivoshein as modified teaches downloading the device description includes: connecting the host system to a communication network [col. 13, lines 36 – 60

of Krivoshein]; requesting the device description from a device description database connected to the communication network [col. 14, lines 23 – 50 of Krivoshein]; and receiving the device description from the device description database [col. 5, lines 5 – 40 of Pagnano].

17. As to claim 7, Krivoshein teaches the device description database is one of a Fieldbus database, a Profibus database and a HART communication foundation database [col. 34, lines 52 – 67].

18. As to claim 8, Krivoshein as modified teaches downloading the device description includes storing an Internet address of the device description database and using one of an Internet communication protocol and a wireless communication protocol to connect to the device description database [col. 5, lines 5 – 40 of Pagnano].

19. As to claim 10, Krivoshein teaches storing the first device description information on the host system [col. 7, lines 30 – 57].

20. As to claim 11, Krivoshein as modified teaches storing the first device description identification, determining if the host system is connected to the Internet, initiating an Internet session if the host system is connected to the Internet, and sending a request to a device description database connected to the Internet for downloading the first device description onto the host system [col. 5, lines 5 – 40 of Pagano].

21. As to claim 12, Krivoshein teaches storing on the host system a list relating an identification of a device manufacturer to an Internet address of a device description database provided by the device manufacturer [col. 9, lines 13 – 60].

22. As to claim 13, Krivoshein as modified teaches the host application is one of (1) an asset management system application [col. 15, line 57 – col. 16, line 33 of Krivoshein], (2) a plant simulation application, (3) a plant maintenance application [col. 4, lines 28 – 45 of Pagnano], (4) a plant monitoring application, and (5) a process control application [col. 34, lines 36 – 54 of Krivoshein].

23. As to claim 15, Krivoshein as modified teaches the software routine is further executable on the processing unit to download the device description using one of an Internet protocol and a wireless communication protocol [col. 4, lines 45 – 60 of Pagnano].

24. As to claim 16, Krivoshein teaches the software routine is further executable on the processing unit to identify a device description language source of the host application, interpret the device description into the device description language source and insert the device description into the host application [col. 16, line 65 – col. 17, line 23].

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25. As to claim 17, Krivoshein as modified teaches the host application is one of (1) an asset management system application [col. 15, line 57 – col. 16, line 33 of Krivoshein], (2) a plant simulation application, (3) a plant maintenance application [col. 4, lines 28 – 45 of Pagnano], (4) a plant monitoring application, and (5) a process control application [col. 34, lines 36 – 54 of Krivoshein].

26. As to claim 18, Krivoshein as modified teaches the software routine is further to update a remote host application located on a remote computer communicatively connected to the computer system [col. 4, lines 45 – 60 of Pagnano].

27. As to claim 20, Krivoshein teaches the downloading module communicates with the device description database using the Internet protocol [col. 4, lines 45 – 60 of Pagnano].

### **CONTACT INFORMATION**

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (571) 272-3768. The examiner can normally be reached on Mon - Fri, 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571)272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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